



QUARTERLY GROUNDWATER MONITORING REPORT

First Quarter 2006 (Fifteenth Quarterly)

Sampled on January 22, 2006

Job # SP-23

LOP # 12660

BO&T Company Office (BO&T Old Office)

211 Railroad Avenue
Blue Lake, California 95525

April 18, 2006

This *Quarterly Groundwater Monitoring Report* was prepared by SounPacific Environmental Services (SounPacific) for David and Christina Fisch, and includes data from previous studies conducted by Clearwater Group, Inc. (CGI) and SounPacific, and information gathered from a review of relevant files at the Humboldt County Department of Health and Human Services: Division of Environmental Health (HCDEH). BO&T Old Office (the Site) is located at 211 Railroad Avenue, Blue Lake, California (Figure 1).

SITE DESCRIPTION

The Site is surfaced around the current structure with concrete and vegetation. Site improvements consist of a single story building in the southern portion of the property with the entrance of the building facing south towards Railroad Avenue. A storage building is located adjacent to the eastern property line immediately north of the primary building (Figure 2). The Site is serviced by public utilities. Surface water is controlled by storm drains.

SITE TOPOGRAPHY AND LAND USE

SounPacific understands that the property is owned by David and Christina Fisch of Valley Springs, California. The main structure is currently used as an office for Fisch Environmental. The land use in the immediate vicinity is residential with an interspersed commercial properties. Residential properties lie to the north, east, south, and west of the Site. The Site is located approximately 90 feet above mean sea level (amsl). The Mad River is located approximately one half mile to the south and Powers Creek is located approximately one-quarter mile to the east of the Site. The City of Blue Lake is situated in the Mad River flood plain. Site topography slopes gently toward the southwest (Figure 1).

SITE HISTORY

Previous studies by CGI and SounPacific indicated the following historical information:

1998 UST Removal (CGI)

On March 6, 1998, Beacom Construction of Fortuna, California (Beacom), removed an UST from the Site. Following the UST removal, soil and groundwater samples (SW-1 through SW-4) were collected by CGI from the excavation sidewalls at depths between seven (7) and eight (8) feet below ground surface (bgs) (Figure 3). In addition, soil samples (PI-1 and PI-2) were collected from beneath each end of the pump dispenser island at a depth of three (3) feet bgs (Figure 3). Soil samples (SW-3 and SW-4) collected from the eastern sidewall of the excavation were impacted with the highest concentrations of levels of total petroleum hydrocarbons as gasoline (TPHg), which exceeded 100 ppm, along with levels of benzene, toluene, xylenes, ethylbenzene (BTXE), methyl tertiary butyl ether (MTBE), TPH as diesel (TPHd), and TPH as motor oil (TPHmo) (Table 1). The remaining samples reported low concentrations (< 25 ppm) of these constituents. A groundwater sample (GW-1) was also collected from the bottom of the excavation (Figure 3). This groundwater sample reported extremely elevated concentrations of total petroleum hydrocarbons (TPHg at 180,000 ppb, TPHd at 230,000 ppb). In addition, an elevated level of lead (130 ppb) was also reported in the groundwater (Table 2).

2000 Subsurface Investigation (SounPacific)

In a letter dated January 14, 1999, HCDEH requested a workplan be prepared and implemented to determine the extent of contamination beneath the Site and conduct a sensitive receptor survey within a 1,000-foot radius of the Site. The workplan was prepared by CGI and submitted July 9, 1999. On October 24 and 25, 2000, SounPacific conducted the subsurface investigation in accordance with the approved CGI workplan. Ten soil borings (B-1 through B-10) were drilled and soil samples were collected at five-foot intervals to a depth of 15 feet bgs, with the exception of boring B-8, in which an additional sample was collected at eight (8) feet bgs (Figure 3). Soil analytical results indicated that the sorbed phase contamination was restricted to boring B-5, which was located adjacent to the site of the former UST (Table 1). Groundwater samples were collected from eight (8) of the ten (10) boreholes. Laboratory analysis determined that groundwater was impacted throughout the Site (Table 2), with the majority of contamination adjacent to the former USTs and dispenser areas. In addition, all eight (8) groundwater samples reported lead at concentrations in excess of 100 ppb. Further investigation was deemed necessary in order to define the lateral and vertical extent of soil and groundwater contamination.

2000 Sensitive Receptor Survey (SounPacific)

In October of 2000, SounPacific staff along with City of Blue Lake Public Works personnel conducted a door-to-door well survey. Three domestic wells were discovered within a 1,000-foot radius of the Site, and their locations were documented in SounPacific's *Report of Findings*, dated December 20, 2000. One domestic well (DW-1) positioned across E Street, to the west of the Site, was sampled during the third quarter 2003 (Figure 2). Analysis of the well sample did not report the presence of any petroleum hydrocarbons (Table 3).

2002 Subsurface Investigation (SounPacific)

In a letter dated March 1, 2001, HCDEH requested SounPacific to submit a workplan to define the extent of contamination, install monitor wells, and sample wells identified by the sensitive receptor survey. The SounPacific, *Subsurface Investigation Workplan*, was submitted April 25,

2001. The Workplan was implemented in May 2002, with the objective to determine the horizontal and vertical extent of the soil and groundwater contamination. The investigation consisted of drilling nine (9) soil borings (B-11 through B-16 and MW-1 through MW-3) (Figure 3). Soil samples were collected from six (6) soil borings (B-11 through B-16) at four-foot intervals. The soils from boreholes MW-1 through MW-3 were logged, and then the borings were converted to monitoring wells (MW-1 through MW-3). No soil samples were retained for laboratory analysis from the well borings. No soil contamination of concern was identified in any of the borings, although 197 ppm TPHmo was reported in boring B-12 (Table 1). Elevated TPH's was reported in the groundwater from four (4) of the six (6) borings, being reported to the north of the former UST, in boreholes B-15 and B-16, and to the west, in boreholes B-11 and B-12. The most significant groundwater contamination was at borehole B-12, where 25,800 ppb TPHg and 28,865 ppb of MTBE was reported, (Table 2). The analytical results from this investigation indicated that delineation of soil and/or groundwater was still necessary to the east, west and south of the Site.

2005 Subsurface Investigation (SounPacific)

On January 11 & 12, 2005, SounPacific performed additional subsurface investigation at the Site to further delineate the lateral extent of groundwater contamination to the east, west, and south of the Site, and determine the vertical delineation of the MTBE plume using depth discrete sampling. The soil delineation consisted of drilling two (2) onsite soil borings (B-19 and B-20) and two (2) offsite soil borings (B-17 and B-18) (Figure 3). The only elevated soil analytical result was reported in boring B-20, where an elevated concentration of TPHg at 117 ppm was reported at 12 feet bgs (Table 1). Soil analytical results including previous investigations have indicated that the soil contamination is delineated onsite, as well as to the south, east and north of the Site. Lateral and vertical soil delineation is still necessary to the west of the Site. Groundwater samples were collected from borings B-17 through B-25 to determine the lateral and vertical extent of the groundwater plume. The groundwater contaminant plume is migrating in the southwestern direction according to analytical results from this investigation (Table 2). However, groundwater levels were only observed at approximately three to four feet bgs during this investigation and groundwater samples collected from the borehole locations were collected

at the soil/groundwater interface. Therefore, suspected diving groundwater plumes, if existing, could not be properly characterized vertically until depth discrete groundwater samples were collected. Further investigation would be necessary for adequate lateral and vertical delineation.

RESULTS OF QUARTERLY SAMPLING

A quarterly groundwater monitoring program was implemented by SounPacific on July 15, 2002, and will continue until further notice. The program consists of recording quarterly water level data and collecting quarterly groundwater samples for laboratory analysis. Water level data is used to develop a figure which displays the groundwater gradient and average flow direction using standard three-point calculations. Analytical results from groundwater samples collected from the monitoring wells during quarterly sampling events indicated hydrocarbon contamination levels in the groundwater beneath the Site. The three monitoring wells at the Site were gauged and sampled on January 22, 2006.

FIELD DATA

Wells gauged:	MW-1, 2, and 3
Groundwater:	Depth ranged from 1.62 to 2.67 feet below top of casing (Table 3) Elevation ranged from 87.70 to 89.36 feet above mean sea level (Table 3)
Floating product:	Sheen detected in MW-1 and MW-2
GW flow direction:	WSW (Figure 4)
GW gradient:	0.03 feet per foot (ft/ft) (Figure 4)

On January 22, 2006, the depth to groundwater in the Site's three monitoring wells ranged from 1.62 feet below top of casing (btoc) in well MW-1 to 2.67 feet btoc in MW-3. When corrected to mean sea-level, water level elevations ranged from 87.70 feet amsl in MW-3 to 89.36 feet amsl in MW-2. Groundwater levels for the January 22, 2006 monitoring event, along with historical level and elevations are included in Table 3. Groundwater flow was towards the west southwest at a gradient of 0.03 feet per foot. The groundwater flow direction and gradient are graphically depicted in Figure 4. Prior to sampling, all wells were purged; the groundwater field parameters

for each well are presented below.

MONITORING WELL MW-1 GROUNDWATER FIELD PARAMETERS

Time	Total Vol. Removed/ gal	pH	Temp./ F	Cond./ ms(cm)⁻¹
12:57 pm	0	6.05	55.77	0.371
1:02	2	6.01	56.98	0.341
1:06	4	5.99	57.20	0.266
1:10	6	5.99	57.33	0.235

MONITORING WELL MW-2 GROUNDWATER FIELD PARAMETERS

Time	Total Vol. Removed/ gal	pH	Temp./ F	Cond./ ms(cm)⁻¹
1:26 pm	0	5.96	55.02	0.151
1:30	2	5.99	57.13	0.153
1:35	4	6.06	57.27	0.155
1:40	6	6.02	57.87	0.154

MONITORING WELL MW-3 GROUNDWATER FIELD PARAMETERS

Time	Total Vol. Removed/ gal	pH	Temp./ F	Cond./ ms(cm)⁻¹
2:09 pm	0	6.21	55.25	0.551
2:13	1.9	6.21	57.21	0.564
2:18	3.8	6.20	57.97	0.557
2:23	5.7	6.15	58.64	0.528

ANALYTICAL RESULTS

Sampling locations: MW-1, 2, and 3

Analyses performed: TPHg, BTXE, MTBE, DIPE, TAME, ETBE, and TBA

Laboratories Used: Basic Labs, Redding, California (ELAP #1677)

The analytical results for the current monitoring event are presented below and graphically depicted in Figure 5. The laboratory report is included as Appendix A. The historical analytical results for all monitoring wells, since the implementation of groundwater monitoring are included as Table 4.

	<u>MW-1</u> ppb	<u>MW-2</u> ppb	<u>MW-3</u> ppb
TPHg:	63.1	73.0	5,950
Benzene:	ND < 0.5	4.4	ND < 25.0
Toluene:	ND < 0.5	ND < 0.5	ND < 25.0
Xylenes:	ND < 1.0	ND < 1.0	ND < 50.0
Ethylbenzene:	ND < 0.5	ND < 0.5	ND < 25.0
MTBE:	92.6	92.5	12,500
DIPE:	ND < 0.5	ND < 0.5	ND < 25.0
TAME:	ND < 0.5	0.8	67.0
ETBE:	ND < 0.5	ND < 0.5	ND < 25.0
TBA:	ND < 50	ND < 50	ND < 2,500

ND = non-detectable

COMMENTS AND RECOMMENDATIONS

On January 22, 2006 the 15th *Groundwater Monitoring Event* for the three onsite monitoring wells was conducted at the BO&T Old Office at 211 Railroad Avenue in Blue Lake, California. A summary of the results are presented on the next page.

- The depth to groundwater in the three (3) onsite wells ranged from 1.62 feet bgs (MW-1)

to 2.67 feet bgs (MW-3). Groundwater flow was towards the west southwest at a gradient of 0.03 feet per foot.

- Groundwater samples from the three (3) onsite monitoring wells were collected and analyzed for TPHg, BTXE, MTBE, DIPE, TAME, ETBE, and TBA. Laboratory results reported TPHg in all three (3) wells at concentrations ranging between 63.1 ppb (MW-1) and 5,950 ppb (MW-3). Other than benzene that was reported in MW-2 at a concentration of 4.4 ppb, no BTXE compounds were reported. MTBE was reported in all wells at concentrations that ranged between 92.5 ppb (MW-2) and 12,500 ppb (MW-3). TAME was reported in two (2) wells at concentrations of 0.8 ppb (MW-2) and 67.0 ppb (MW-3). No other constituents were detected in any wells at or above laboratory detection limits.

Based upon these results the following observations and conclusions have been made:

- TPHg has been detected in well MW-1 in ten of the sixteen sampling events conducted since the inception of the monitoring, at varying concentrations. Laboratory results have detected TPHg in wells MW-2 and MW-3 in all but two sampling events since the inception of the monitoring program, with varying concentrations. See Figures 6-8.
- BTXE compounds have never been detected in well MW-1. Benzene has been consistently reported in well MW-2. Xylenes and ethylbenzene were reported in MW-2 inconsistently. Toluene, xylenes, and ethylbenzene were detected in MW-3 during the second quarter 2004 and 2005 at significant concentrations.
- MTBE has been reported in every well during every sampling event thus far, with the highest concentrations reported in well MW-3. MTBE was reported at the highest concentration thus far in MW-1 during the third quarter 2005. Concentrations have fluctuated in wells MW-1 and MW-2, whereas in well MW-3, concentrations have generally decreased. See Figures 6-8.

- DIPE has not been reported since the inception of the groundwater monitoring program.
- TAME has been reported at various times in monitoring well MW-1 at low concentrations. In well MW-2, TAME has been reported in ten out of sixteen monitoring events with a general decrease in concentration over time. TAME has been reported at the highest concentrations in well MW-3, and the levels are fluctuating with time.
- ETBE was reported twice in well MW-3 since the inception of the monitoring during the first quarter of 2003 and 2005.
- TBA was reported once in well MW-1 during the third quarter 2003. TBA has not been reported in well MW-2 thus far. TBA was reported twice in well MW-3 since the inception of the monitoring during the first quarter of 2003 and 2005.

Based on the results of the January 2006 monitoring event and historical results, the following future activities are proposed:

- Quarterly groundwater sampling will be continued until further notice. Quarterly groundwater level measurements will be collected from the three (3) onsite monitoring wells to determine groundwater flow direction and gradient. Collected groundwater samples will be analyzed for TPHg, BTXE, and MTBE.
- SounPacific recently performed a subsurface investigation, which included the installation of eight (8) additional monitoring wells which will be incorporated into the ongoing monitoring program. Soil and groundwater samples were collected from each well location and submitted for laboratory analysis. Once the analytical data is received from the lab, SounPacific will prepare and submit a Report of Findings to HCDEH. Data from this investigation, along with information from previous site investigations and the ongoing groundwater monitoring will be used in the preparation of a corrective action

plan (CAP) for the Site.

CERTIFICATION

This report was prepared under the direct supervision of a California registered geologist at SounPacific. All information provided in this report including statements, conclusions and recommendations are based solely upon field observations and analyses performed by a state-certified laboratory. SounPacific is not responsible for laboratory errors.

SounPacific promises to perform all its work in a manner that is currently used by members in similar professions working in the same geographic area. SounPacific will do whatever is reasonable to ensure that data collection is accurate. Please note however, that rain, buried utilities, and other factors can influence groundwater depths, directions and other factors beyond what SounPacific could reasonably determine.

SounPacific

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ATTACHMENTS

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Tables & Chart

Table 1
Soil Analytical Results
Big Oil and Tire Old Office
211 Railroad Avenue
Blue Lake, California 95525

Sample ID	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	MTBE (ppm)	TPHd (ppm)	TPHmo (ppm)	Total Pb (ppm)
SW-1	SW-1	3/6/1998	24	0.53	ND < 0.16	0.085	0.33	1.4	1.1	ND < 10	9.3
SW-2	SW-2	3/6/1998	9.3	0.067	0.26	0.92	0.17	ND < 0.10	24	ND < 10	9
SW-3	SW-3	3/6/1998	110	1.8	1.3	5.71	2.2	2.9	6.6	60	43
SW-4	SW-4	3/6/1998	120	2.6	1.1	11.2	2.1	5.1	7.9	52	7
PI-1	PI-1	3/6/1998	2.3	0.027	0.18	0.192	0.037	0.056	ND < 1.0	ND < 10	7.7
PI-2	PI-2	3/6/1998	1.7	0.097	0.12	0.102	0.02	0.15	ND < 1.0	11	10
B-1 @5'	B-1	10/24/2000	ND < 1.0	0.0056	ND < 0.010	ND < 0.005	ND < 0.005	0.062	ND < 1.0	ND < 10	9.3
B-1 @10'	B-1	10/24/2000	ND < 1.0	0.0057	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	8.8
B-1 @15'	B-1	10/24/2000	ND < 1.0	0.0069	ND < 0.005	ND < 0.005	ND < 0.005	0.16	ND < 1.0	ND < 10	9.7
B-2 @5'	B-2	10/24/2000	ND < 1.0	0.0059	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	8.1
B-2 @10'	B-2	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	0.11	ND < 1.0	ND < 10	10
B-2 @15'	B-2	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	9.3
B-3 @5'	B-3	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.030	ND < 0.005	ND < 0.005	0.055	ND < 1.0	ND < 10	8.4
B-3 @10'	B-3	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	7.1
B-4 @5'	B-4	10/24/2000	8.2	ND < 0.005	ND < 0.020	ND < 0.005	ND < 0.005	0.75	ND < 1.0	ND < 10	8.9
B-4 @10'	B-4	10/24/2000	1.1	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	0.83	ND < 1.0	ND < 10	8.7
B-4 @15'	B-4	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	6.7
B-5 @5'	B-5	10/24/2000	120	0.076	ND < 0.50	1.74	0.42	0.58	240	39	11
B-5 @10'	B-5	10/24/2000	3.3	5.0	0.41	0.584	0.64	1.6	ND < 1.0	19	12
B-6 @5'	B-6	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.020	ND < 0.005	ND < 0.005	0.19	ND < 1.0	ND < 10	8.9
B-6 @10'	B-6	10/24/2000	1.8	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	0.85	ND < 1.0	ND < 10	9.4
B-7 @5'	B-7	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	8.1
B-7 @10'	B-7	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	6.9
B-8 @5'	B-8	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	16
B-8 @8'	B-8	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	13
B-9 @5'	B-9	10/24/2000	ND < 1.0	0.010	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	9.4
B-9 @10'	B-9	10/24/2000	ND < 1.0	0.0076	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	9.0
B-10 @5'	B-10	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.020	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	8.9
B-10 @10'	B-10	10/24/2000	ND < 1.0	0.0056	ND < 0.010	ND < 0.005	ND < 0.005	1.2	ND < 1.0	ND < 10	7.8

Table 1 (cont.)
Soil Analytical Results
Big Oil and Tire Old Office
211 Railroad Avenue
Blue Lake, California 95525

Sample ID	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	MTBE (ppm)	TPHd (ppm)	TPHmo (ppm)	Total Pb (ppm)
SB-11 @ 4'	B-11	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	39.0	----
SB-11 @ 8'	B-11	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.0066	ND < 10	ND < 10	----
SB-11 @ 12'	B-11	5/15/2002	0.93	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.0383	ND < 10	ND < 10	----
SB-12 @ 4'	B-12	5/15/2002	0.195	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.071	ND < 10	ND < 10	----
SB-12 @ 8'	B-12	5/15/2002	1.58	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.897	ND < 10	33.7	----
SB-12 @ 12'	B-12	5/15/2002	2.67	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	1.02	17.6	197	----
SB-13 @ 4'	B-13	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	----
SB-13 @ 8'	B-13	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	----
SB-13 @ 12'	B-13	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	----
SB-14 @ 4'	B-14	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	----
SB-14 @ 8'	B-14	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	----
SB-14 @ 12'	B-14	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	----
SB-15 @ 4'	B-15	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	----
SB-15 @ 8'	B-15	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	----
SB-15 @ 12'	B-15	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.005	ND < 10	ND < 10	----
SB-16 @ 4'	B-16	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	----
SB-16 @ 8'	B-16	5/15/2002	0.174	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.027	ND < 10	ND < 10	----
SB-16 @ 12'	B-16	5/15/2002	0.794	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.313	ND < 10	ND < 10	----

notes:

TPHg: Total petroleum hydrocarbons as gasoline

MTBE: Methyl tertiary butyl ether

DIPE: Diisopropyl ether

TPHd: Total petroleum hydrocarbons as diesel

TAME: Tertiary amyl methyl ether

ETBE: Ethyl tertiary butyl ether

TBA: Tertiary butanol

ppm: parts per million = $\mu\text{g/g}$ = mg/kg = $1000 \mu\text{g/kg}$

TPHmo: Total petroleum hydrocarbons as motor oil

ND: Not detected at or below the method detection limit as shown.

Pb: lead

Table 1 (cont.)
Soil Analytical Results
Big Oil and Tire Old Office
211 Railroad Avenue
Blue Lake, California 95525

Sample ID	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	MTBE (ppm)	DIPE (ppm)	TAME (ppm)	ETBE (ppm)	TBA (ppm)	TPHd (ppm)	TPHmo (ppm)
SB-17 @ 4.5'	B-17	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-17 @ 8'	B-17	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-17 @ 12'	B-17	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-17 @ 14'	B-17	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-17 @ 16'	B-17	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-17 @ 19'	B-17	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-18 @ 4'	B-18	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-18 @ 8'	B-18	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-18 @ 10'	B-18	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.0085	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-18 @ 12'	B-18	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.0426	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-18 @ 16'	B-18	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-18 @ 17'	B-18	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-18 @ 20'	B-18	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-19 @ 4'	B-19	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-19 @ 8'	B-19	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.032	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-19 @ 10'	B-19	1/12/2005	0.337	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.476	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-19 @ 12'	B-19	1/12/2005	0.475	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.864	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-19 @ 18'	B-19	1/12/2005	0.0901	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.118	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-19 @ 20'	B-19	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-19 @ 22'	B-19	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-19 @ 24'	B-19	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-20 @ 3'	B-20	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-20 @ 8'	B-20	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	14	12
SB-20 @ 12'	B-20	1/12/2005	117	ND < 0.5	ND < 0.5	ND < 1.5	0.529	ND < 0.5	ND < 0.005	ND < 500	ND < 0.5	ND < 5.00	ND < 10	10
SB-20 @ 15'	B-20	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.0595	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-20 @ 20'	B-20	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-20 @ 21'	B-20	1/12/2005	0.230	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-20 @ 24'	B-20	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10

notes:

TPHg: Total petroleum hydrocarbons as gasoline
MTBE: Methyl tertiary butyl ether
DIPE: Diisopropyl ether
TAME: Tertiary amyl methyl ether
ETBE: Ethyl tertiary butyl ether
TBA: Tertiary butanol

TPHd: Total petroleum hydrocarbons as diesel
TPHmo: Total petroleum hydrocarbons as motor oil
Pb: lead
ND: Not detected at or below the method detection limit as shown.
ppm: parts per million = µg/g = mg/kg = 1000 µg/kg

Table 2
Groundwater Analytical Results from Boreholes
Big Oil and Tire Old Office
211 Railroad Avenue
Blue Lake, California 95525

Sample ID	Sample Location	Sample Date	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Xylenes (ppb)	Ethylbenzene (ppb)	MTBE (ppb)	DIPE (ppb)	TAME (ppb)	ETBE (ppb)	TBA (ppb)	TPHd (ppb)	TPHmo (ppb)	Methanol (ppb)	Ethanol (ppb)	Total Pb (ppb)
GW-1	GW-1	3/6/1998	180,000	19,000	16,000	15,700	3,400	65,000	----	----	----	----	230,000	48,000	----	----	130
B-1	B-1	10/25/2000	110	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	120	----	----	----	----	ND < 50	ND < 170	----	----	1,800
B-3	B-3	10/25/2000	390	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	630	----	----	----	----	ND < 50	ND < 170	----	----	130
B-5	B-5	10/25/2000	35,000	4,100	13	408.5	460	12,000	----	----	----	----	21,000	5,100	----	----	770
B-6	B-6	10/25/2000	13,000	ND < 0.50	ND < 1.0	ND < 0.50	ND < 0.50	13,000	----	----	----	----	ND < 50	ND < 170	----	----	410
B-7	B-7	10/25/2000	57	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	47	----	----	----	----	ND < 50	ND < 170	----	----	130
B-8	B-8	10/25/2000	ND < 50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	15	----	----	----	----	ND < 50	ND < 170	----	----	2,900
B-9	B-9	10/25/2000	180	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	38	----	----	----	----	ND < 50	ND < 170	----	----	170
B-10	B-10	10/25/2000	12,000	ND < 0.50	ND < 2.0	ND < 0.50	ND < 0.50	20,000	----	----	----	----	ND < 50	ND < 170	----	----	110
GWSB-11 @ 12'	B-11	5/15/2002	3,710	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	2,840	ND < 0.5	11.8	ND < 0.5	ND < 40	ND < 50	ND < 50	ND < 5,000	ND < 5,000	----
GWSB-12 @ 12'	B-12	5/15/2002	25,800	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	28,865	ND < 0.5	94.9	ND < 0.5	ND < 40	ND < 50	ND < 50	ND < 5,000	ND < 5,000	----
GWSB-13 @ 12'	B-13	5/15/2002	ND < 50	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	31.7	ND < 0.5	ND < 0.5	ND < 0.5	ND < 40	ND < 50	ND < 50	ND < 5,000	ND < 5,000	----
GWSB-14 @ 16'	B-14	5/16/2002	ND < 50	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	ND < 2.0	ND < 0.5	ND < 0.5	ND < 0.5	ND < 40	ND < 50	ND < 50	ND < 5,000	ND < 5,000	----
GWSB-15 @ 12'	B-15	5/15/2002	245	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	127	ND < 0.5	ND < 0.5	ND < 0.5	ND < 40	ND < 50	ND < 50	ND < 5,000	ND < 5,000	----
GWSB-16 @ 12'	B-16	5/15/2002	3,740	53.2	1.2	6.5	18.2	3,860	ND < 0.5	ND < 0.5	ND < 0.5	ND < 40	ND < 50	ND < 50	ND < 5,000	ND < 5,000	----
SBGW-17	B-17	1/12/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 1.0	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50	684	201	----	----	----
SBGW-18	B-18	1/12/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	13.7	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50	ND < 50	ND < 50	----	----	----
SBGW-19	B-19	1/12/2005	614	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	902	ND < 0.5	10.0	ND < 5.0	ND < 50	ND < 50	ND < 50	----	----	----
SBGW-20	B-20	1/12/2005	2,400	107	5.8	44.5	181	1,490	ND < 5.0	ND < 50	ND < 50	ND < 500	9,440	3,620	----	----	----
SBGW-21	B-21	1/12/2005	97.0	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	139	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50	ND < 50	118	----	----	----
SBGW-22	B-22	1/11/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 1.0	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50	ND < 50	ND < 50	----	----	----
SBGW-23	B-23	1/11/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 1.0	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50	ND < 50	ND < 50	----	----	----
SBGW-24	B-24	1/11/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	7.2	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50	ND < 50	ND < 50	----	----	----
SBGW-25	B-25	1/11/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 1.0	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50	ND < 77	ND < 77	----	----	----

Notes:
TPHg: Total petroleum hydrocarbons as gasoline
MTBE: Methyl tertiary butyl ether
DIPE: Diisopropyl ether
TAME: Tertiary amyl methyl ether
ETBE: Ethyl tertiary butyl ether

TBA: Tertiary butanol
TPHd: Total petroleum hydrocarbons as diesel
TPHmo: Total petroleum hydrocarbons as motor oil
Pb: lead
ND: Not detected at or below the method detection limit as shown.
ppb: parts per billion = µg/l = .001 mg/l = 0.001 ppm.

Table 3**Water Levels**

Big Oil and Tire Old Office
211 Railroad Avenue
Blue Lake, California 95525

Sample Location	Date	Depth to Bottom/ Feet BGS	Survey Height/ Feet Above MSL	Depth to Water/ Feet BGS	Adjusted Elevation/ Feet Above MSL	Thickness of Floating Product/ Feet
MW-1	5/19/2002	14.19	90.50	5.52	84.98	0.00
	6/16/2002	14.21	90.50	6.35	84.15	0.00
	7/16/2002	14.20	90.50	7.11	83.39	0.00
	8/17/2002	14.18	90.50	8.61	81.89	0.00
	9/11/2002	14.20	90.50	7.53	82.97	0.00
	10/15/2002	14.20	90.50	7.87	82.63	0.00
	11/15/2002	14.20	90.50	6.06	84.44	0.00
	12/16/2002	14.41	90.50	2.52	87.98	0.00
	1/13/2003	14.22	90.50	2.11	88.39	0.00
	2/14/2003	14.18	90.50	3.43	87.07	0.00
	3/12/2003	14.18	90.50	4.08	86.42	0.00
	4/11/2003	14.18	90.50	2.23	88.27	0.00
	7/14/2003	14.39	90.50	6.52	83.98	0.00
	10/26/2003	14.39	90.50	7.70	82.80	0.00
	1/17/2004	14.39	90.50	2.53	87.97	0.00
	4/22/2004	14.39	90.50	3.43	87.07	0.00
	7/23/2004	14.39	90.50	7.35	83.15	0.00
	10/31/2004	14.11	90.50	4.36	86.14	0.00
	1/21/2005	14.37	90.50	3.25	87.25	0.00
	4/29/2005	14.37	90.50	4.05	86.45	0.00
	7/21/2005	14.40	90.50	5.75	84.75	0.00
	10/27/2005	14.37	90.50	5.77	84.73	0.00
	1/22/2006	14.40	90.50	1.62	88.88	0.00
MW-2	5/19/2002	14.25	91.20	5.25	85.95	0.00
	6/16/2002	14.23	91.20	6.19	85.01	0.00
	7/16/2002	14.21	91.20	7.12	84.08	0.00
	8/17/2002	14.16	91.20	7.80	83.40	0.00
	9/11/2002	14.14	91.20	7.71	83.49	0.00
	10/15/2002	14.13	91.20	8.28	82.92	0.00
	11/15/2002	14.19	91.20	6.30	84.90	0.00
	12/16/2002	14.43	91.20	3.73	87.47	0.00
	1/13/2003	14.14	91.20	2.25	88.95	0.00
	2/14/2003	14.21	91.20	3.25	87.95	0.00
	3/12/2003	14.15	91.20	3.67	87.53	0.00
	4/11/2003	14.15	91.20	2.20	89.00	0.00
	7/14/2003	14.30	91.20	6.61	84.59	0.00
	10/26/2003	14.30	91.20	8.18	83.02	0.00
	1/17/2004	14.30	91.20	2.37	88.83	0.00
	4/22/2004	14.30	91.20	2.90	88.30	0.00
	7/23/2004	14.30	91.20	7.48	83.72	0.00
	10/31/2004	14.05	91.20	4.19	87.01	0.00
	1/21/2005	14.28	91.20	2.95	88.25	0.00
	4/29/2005	14.22	91.20	3.45	87.75	0.00
	7/21/2005	14.28	91.20	5.40	85.80	0.00
	10/27/2005	14.24	91.20	6.66	84.54	0.00
	1/22/2006	14.31	91.20	1.84	89.36	0.00

Sample Location	Date	Depth to Bottom/ Feet BGS	Survey Height/ Feet Above MSL	Depth to Water/ Feet BGS	Adjusted Elevation/ Feet Above MSL	Thickness of Floating Product/ Feet
MW-3	5/19/2002	14.15	90.37	19.00	71.37	0.00
	6/16/2002	14.20	90.37	5.96	84.41	0.00
	7/16/2002	14.20	90.37	6.88	83.49	0.00
	8/17/2002	14.20	90.37	8.56	81.81	0.00
	9/11/2002	14.19	90.37	7.25	83.12	0.00
	10/15/2002	14.20	90.37	7.34	83.03	0.00
	11/15/2002	14.21	90.37	7.37	83.00	0.00
	12/16/2002	14.46	90.37	5.88	84.49	0.00
	1/13/2003	14.20	90.37	4.70	85.67	0.00
	2/14/2003	14.20	90.37	6.49	83.88	0.00
	3/12/2003	14.20	90.37	5.78	84.59	0.00
	4/11/2003	14.20	90.37	4.55	85.82	0.00
	7/14/2003	14.40	90.37	7.22	83.15	0.00
	10/26/2003	14.40	90.37	7.26	83.11	0.00
	1/17/2004	14.40	90.37	5.11	85.26	0.00
	4/22/2004	14.40	90.37	4.58	85.79	0.00
	7/23/2004	14.40	90.37	7.23	83.14	0.00
	10/31/2004	14.14	90.37	5.79	84.58	0.00
	1/21/2005	14.41	90.37	4.41	85.96	0.00
	4/29/2005	14.42	90.37	5.10	85.27	0.00
	7/21/2005	14.43	90.37	5.94	84.43	0.00
	10/27/2005	14.42	90.37	5.56	84.81	0.00
	1/22/2006	14.40	90.37	2.67	87.70	0.00

Notes:

Bgs: Below Ground Surface

MSL: Mean Sea Level

Table 4
Groundwater Analytical Results from Monitoring Wells
 Big Oil and Tire Old Office
 211 Railroad Avenue
 Blue Lake, California 95525

Sample Location	Sample Event	Annual Quarter	Sample Date	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Xylenes (ppb)	Ethylbenzene (ppb)	MTBE (ppb)	DIPE (ppb)	TAME (ppb)	ETBE (ppb)	TBA (ppb)	Methanol (ppb)	Ethanol (ppb)	TPHd (ppb)	TPHmo (ppb)
MW-1	Well Installation	Second Quarter	5/19/2002	364	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	344	ND < 0.5	ND < 0.5	ND < 0.5	ND < 40	ND < 5,000	ND < 5,000	170	ND < 50
	First Quarterly	Third Quarter	7/16/2002	144	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	234	ND < 0.5	ND < 0.5	ND < 0.5	ND < 100	ND < 5,000	ND < 5,000	235	ND < 50
	Second Quarterly	Fourth Quarter	10/15/02	99.3	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	225	ND < 0.5	ND < 0.5	ND < 0.5	ND < 100	----	----	ND < 50	ND < 50
	Third Quarterly	First Quarter	1/13/2002	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	130	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	ND < 5.0	ND < 12.5	ND < 50	ND < 500
	Fourth Quarterly	Second Quarter	4/11/2003	ND < 50	ND < 5.0	ND < 5.0	ND < 10	ND < 5.0	150	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	ND < 5.0	ND < 130	ND < 50	ND < 500
	Fifth Quarterly	Third Quarter	7/14/2003	ND < 50	ND < 0.5	ND < 0.5	ND < 1	ND < 0.5	370	ND < 0.5	0.5	ND < 0.5	54	ND < 5.0	ND < 13	ND < 50	ND < 500
	Sixth Quarterly	Fourth Quarter	10/26/2003	ND < 50	ND < 5.0	ND < 5.0	ND < 10.0	ND < 5.0	190	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	ND < 5.0	ND < 200	ND < 50	ND < 500
	Seventh Quarterly	First Quarter	1/17/2004	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	89	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	ND < 5.0	ND < 20	ND < 50	ND < 500
	Eighth Quarterly	Second Quarter	4/22/2004	160	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	260	ND < 0.5	0.8	ND < 0.5	ND < 5.0	----	----	ND < 50	ND < 500
	Ninth Quarterly	Third Quarter	7/23/2004	ND < 500	ND < 5.0	ND < 5.0	ND < 15	ND < 5.0	370	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	----	----	ND < 50	ND < 500
	Tenth Quarterly	Fourth Quarter	10/31/2004	66	ND < 0.5	ND < 0.5	ND < 1.5	ND < 0.5	100	ND < 0.5	0.5	ND < 0.5	ND < 5.0	----	----	ND < 50	ND < 500
	Eleventh Quarterly	First Quarter	1/21/2005	79.1	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	91.3	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50	----	----	ND < 50	ND < 500
	Twelfth Quarterly	Second Quarter	4/29/2005	163	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	234	----	----	----	----	----	----	----	----
	Thirteenth Quarterly	Third Quarter	7/21/2005	366	ND < 1.2	ND < 1.2	ND < 2.5	ND < 1.2	408	ND < 1.2	ND < 1.2	ND < 1.2	ND < 125	----	----	----	----
	Fourteenth Quarterly	Fourth Quarter	10/27/2005	162	ND < 1.2	ND < 1.2	ND < 2.5	ND < 1.2	250	ND < 1.2	1.2	ND < 1.2	ND < 125	----	----	----	----
MW-2	Fifteenth Quarterly	First Quarter	1/22/2006	63.1	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	92.6	ND < 0.5	ND < 0.5	ND < 0.5	ND < 50.0	----	----	----	----
	Well Installation	Second Quarter	5/19/2002	7,830	1,000	ND < 30	128	127	1,600	ND < 50	ND < 50	ND < 50	ND < 4,000	ND < 500,000	ND < 5,000	788	614
	First Quarterly	Third Quarter	7/16/2002	4,980	383	11.1	33.7	57.4	10,700	ND < 10	102	ND < 10	ND < 2000	ND < 5,000	ND < 5,000	322	ND < 50
	Second Quarterly	Fourth Quarter	10/15/02	3,370	127	3.2	1.7	5.5	15,000	ND < 0.5	86.2	ND < 0.5	ND < 100	----	----	ND < 50	ND < 50
	Third Quarterly	First Quarter	1/13/2002	120	12	ND < 0.5	ND < 1.0	1.0	170	ND < 0.5	1.6	ND < 0.5	ND < 5.0	ND < 5.0	ND < 12.5	ND < 50	ND < 500
	Fourth Quarterly	Second Quarter	4/11/2003	240	38	ND < 5.0	ND < 10	5.1	180	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	ND < 5.0	ND < 130	57	ND < 500
	Fifth Quarterly	Third Quarter	7/14/2003	220	5	ND < 5.0	ND < 10	ND < 5.0	1,100	ND < 5.0	9	ND < 5.0	ND < 50	ND < 5.0	ND < 130	ND < 50	ND < 500
	Sixth Quarterly	Fourth Quarter	10/26/2003	730	60	ND < 50	ND < 100	ND < 50	6,500	ND < 50	65	ND < 50	ND < 500	ND < 5.0	ND < 2,000	ND < 50	ND < 500
	Seventh Quarterly	First Quarter	1/17/2004	ND < 500	15	ND < 5.0	ND < 10	ND < 5.0	150	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	ND < 5.0	ND < 200	70	ND < 500
	Eighth Quarterly	Second Quarter	4/22/2004	ND < 500	24	16	ND < 10	ND < 5.0	190	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	----	----	ND < 50	ND < 500
	Ninth Quarterly	Third Quarter	7/23/2004	1,600	9.3	ND < 5.0	ND < 15	ND < 5.0	4,000	ND < 5.0	29	ND < 5.0	ND < 50	----	----	75	ND < 500
	Tenth Quarterly	Fourth Quarter	10/31/2004	550	11	ND < 5.0	ND < 15	ND < 5.0	660	ND < 5.0	5.6	ND < 5.0	ND < 50	----	----	67	ND < 500
	Eleventh Quarterly	First Quarter	1/21/2005	159	9.0	0.7	ND < 1.0	2.1	142	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50	----	----	ND < 50	ND < 50
	Twelfth Quarterly	Second Quarter	4/29/2005	173	18.8	ND < 1.2	ND < 2.5	5.4	170	----	----	----	----	----	----	----	----
	Thirteenth Quarterly	Third Quarter	7/21/2005	1,410	8.9	ND < 5.0	ND < 10.0	ND < 5.0	1,650	ND < 5.0	16.0	ND < 5.0	ND < 500	----	----	----	----
	Fourteenth Quarterly	Fourth Quarter	10/27/2005	2,100	19.3	ND < 5.0	ND < 10.0	ND < 5.0	3,960	ND < 5.0	34.8	ND < 5.0	ND < 500	----	----	----	----
	Fifteenth Quarterly	First Quarter	1/22/2006	73.0	4.4	ND < 0.5	ND < 1.0	ND < 0.5	92.5	ND < 0.5	0.8	ND < 0.5	ND < 50.0	----	----	----	----
MW-3	Well Installation	Second Quarter	5/19/2002	13,300	ND < 30	ND < 30	ND < 60	ND < 30	49,312	ND < 50	ND < 50	ND < 50	ND < 4,000	ND < 500,000	ND < 5,000	146	ND < 50
	First Quarterly	Third Quarter	7/16/2002	12,400	ND < 6.0	ND < 6.0	ND < 12.0	ND < 6.0	36,700	ND < 10	109	ND < 10	ND < 2000	ND < 5,000	ND < 5,000	200	ND < 50
	Second Quarterly	Fourth Quarter	10/15/02	5,690	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	25,800	ND < 0.5	104	ND < 0.5	ND < 100	----	----	ND < 50	ND < 50
	Third Quarterly	First Quarter	1/13/2002	1,800	ND < 0.5	ND < 0.5	ND < 0.9	ND < 0.5	11,000	p	71	6.2	1,000	ND < 5.0	ND < 12.5	ND < 50	ND < 500
	Fourth Quarterly	Second Quarter	4/11/2003	1,300	ND < 50	ND < 50	ND < 100	ND < 50	11,000	ND < 50	ND < 50	ND < 50	ND < 500	ND < 5.0	ND < 1,300	ND < 50	ND < 500
	Fifth Quarterly	Third Quarter	7/14/2003	2,000	ND < 50	ND < 50	ND < 100	ND < 50	19,000	ND < 50	71	ND < 50	ND < 500	ND < 5.0	ND < 1,300	ND < 50	ND < 500
	Sixth Quarterly	Fourth Quarter	10/26/2003	ND < 50	ND < 50	ND < 50	ND < 100	ND < 50	20,000	ND < 50	120	ND < 50	ND < 500	ND < 5.0	ND < 2,000	56	ND < 500
	Seventh Quarterly	First Quarter	1/17/2004	ND < 5,000	ND < 50	ND < 50	ND < 100	ND < 50	11,000	ND < 50	110	ND < 50	ND < 500	ND < 5.0	ND < 2,000	ND < 50	ND < 500
	Eighth Quarterly	Second Quarter	4/22/2004	10,000	ND < 50	100	ND < 100	ND < 50	14,000	ND < 50	130	ND < 50	ND < 500	----	----	ND < 50	ND < 500
	Ninth Quarterly	Third Quarter	7/23/2004	7,300	ND < 50	ND < 50	ND < 150	ND < 50	13,000	ND < 50	92	ND < 50	ND < 500	----	----	120	ND < 500
	Tenth Quarterly	Fourth Quarter	10/31/2004	7,000	ND < 20	ND < 50	ND < 150	ND < 50	11,000	ND < 50	84	ND < 50	ND < 500	----	----	ND < 50	ND < 500
	Eleventh Quarterly	First Quarter	1/21/2005	10,800	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	14,200	ND < 0.5	108	6.6	152	----	----	ND < 50	ND < 50
	Twelfth Quarterly	Second Quarter	4/29/2005	19,200	ND < 100	284	898	136	12,700	----	----	----	----	----	----	----	----
	Thirteenth Quarterly	Third Quarter	7/21/2005	9,050	ND < 62.5	ND < 62.5	ND < 125	ND < 62.5	11,100	ND < 62.5	ND < 62.5	ND < 62.5	ND < 6,250	----	----	----	----
	Fourteenth Quarterly	Fourth Quarter	10/27/2005	5,720	ND < 62.5	ND < 62.5	ND < 125	ND < 62.5	7,790	ND < 62.5	63	ND < 62.5	ND < 6,250	----	----	----	----
	Fifteenth Quarterly	First Quarter	1/22/2006	5,950	ND < 25.0	ND < 25.0	ND < 50.0	ND < 25.0	12,500	ND < 25.0	67.0	ND < 25.0	ND < 2,500	----	----	----	----
DW-1	Fifth Quarterly	Third Quarter	7/14/2003	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	ND < 5.0	ND < 13	ND < 50	ND < 500

Notes:

TPHg: Total Petroleum Hydrocarbons as gasoline

MTBE: Methyl tertiary butyl ether

DIPE: Diisopropyl Ether

TAME: Tertiary amyl methyl ether

ETBE: Ethyl tertiary butyl ether

---: Not tested

TBA: Tertiary butanol

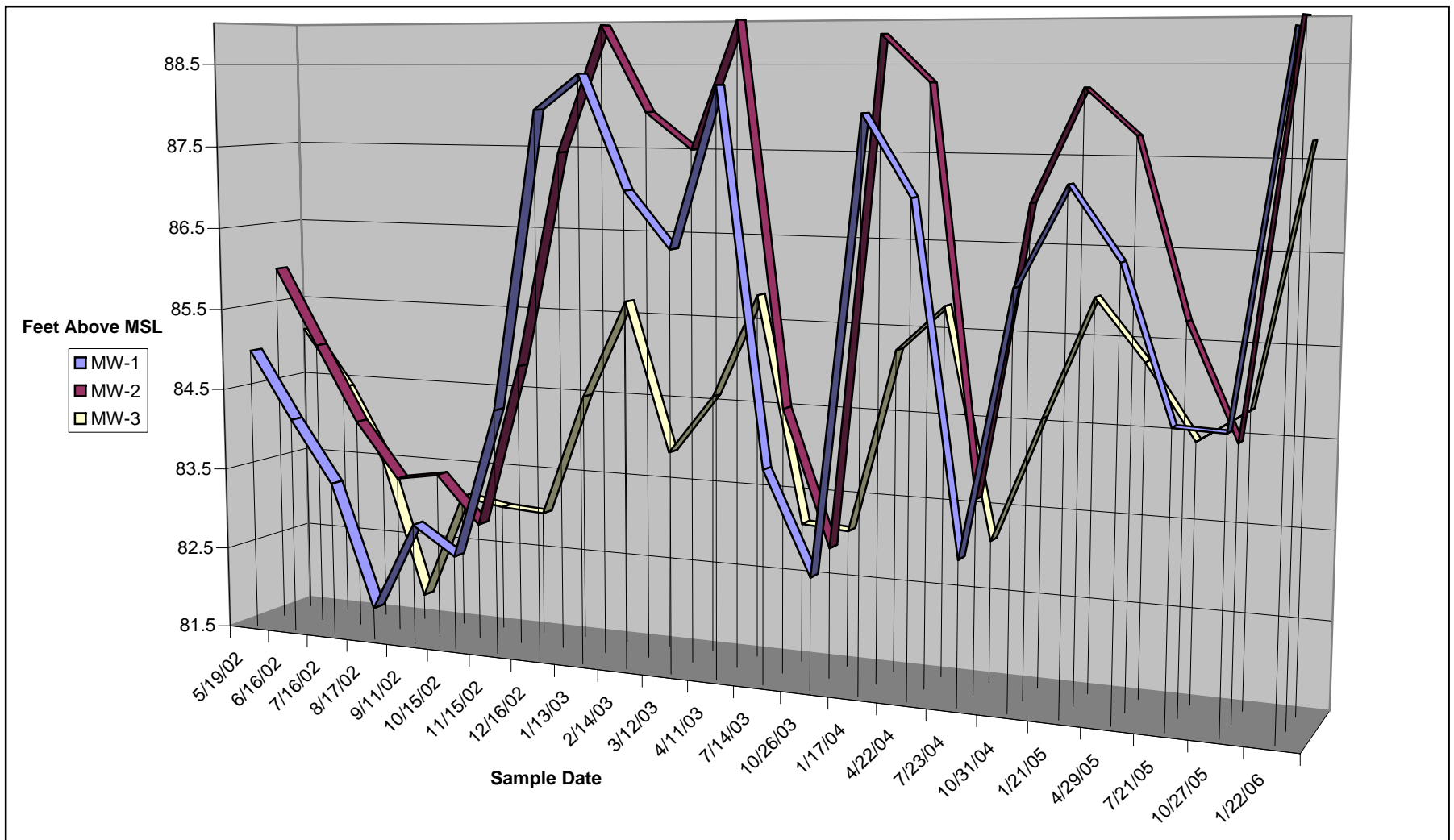
TPHd: Total Petroleum Hydrocarbons as diesel

TPHmo: Total petroleum hydrocarbons as motor oil

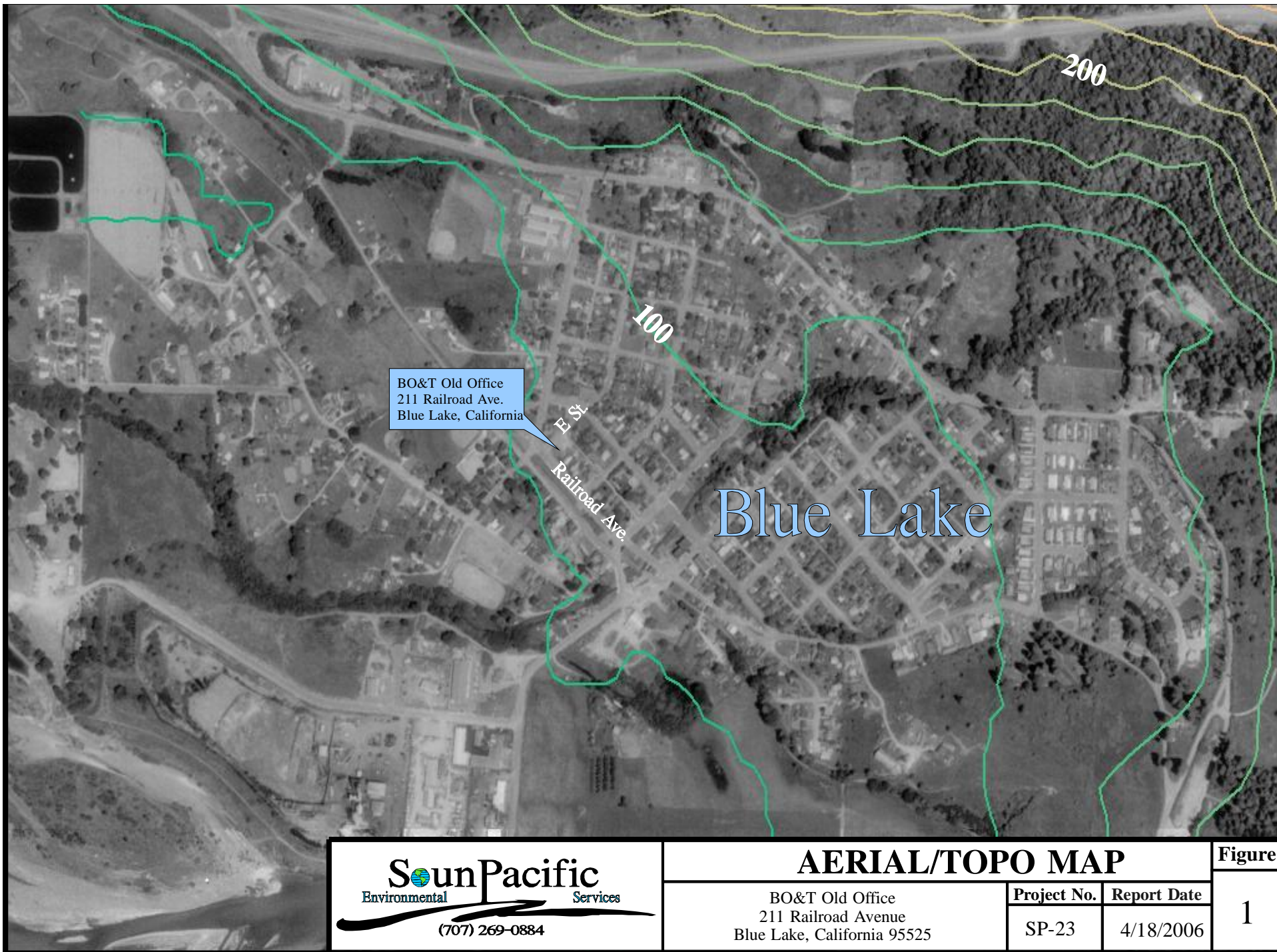
ND: Not detected. Sample was detected at or below the method detection limit as shown.

ppb: parts per billion = µg/l = .001 mg/l = 0.001 ppm

Chart 1
Hydrograph
BO and T Old Office
211 Railroad Avenue
Blue Lake, California 95525



Figures



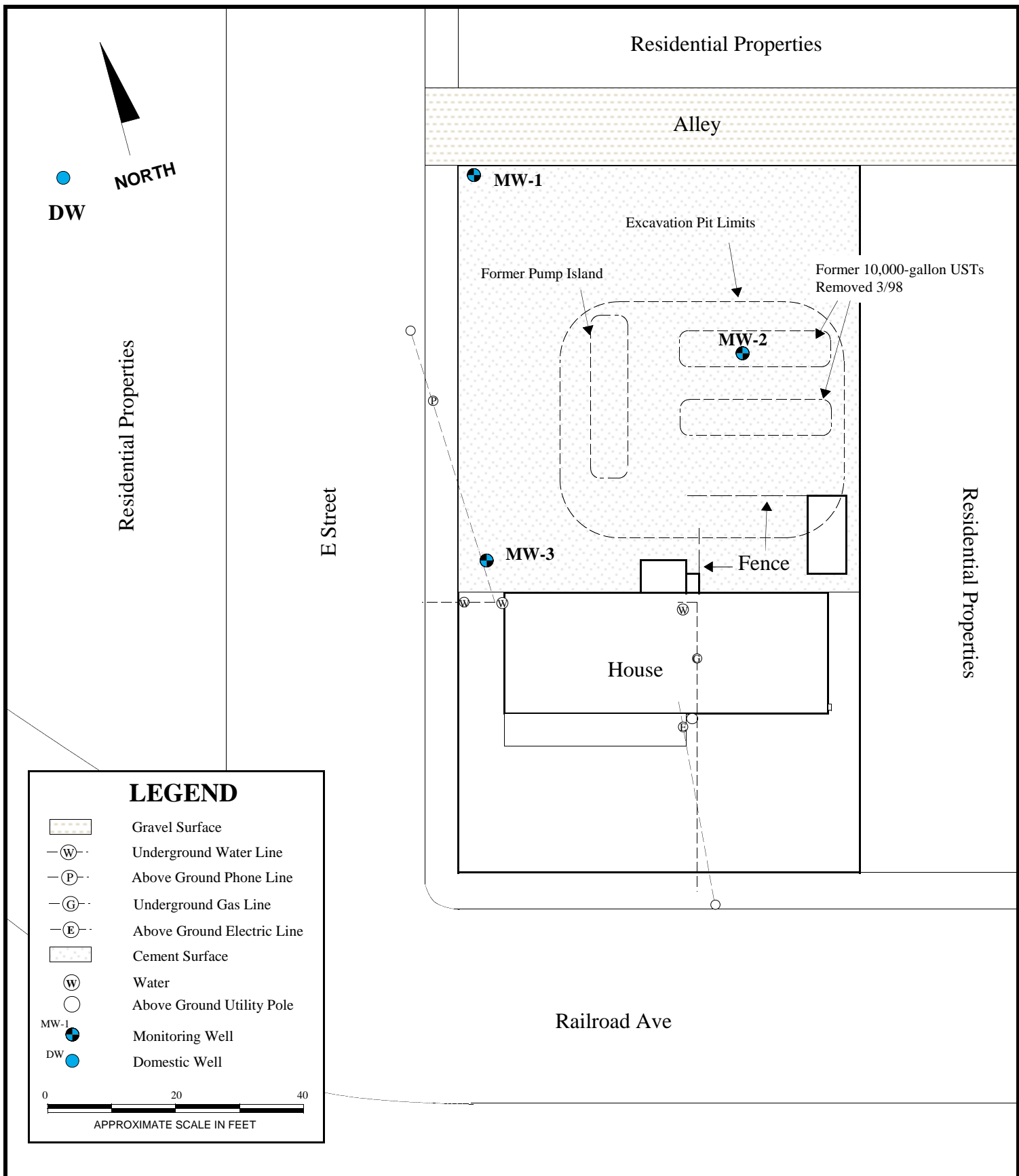
BO&T Old Office
211 Railroad Ave.
Blue Lake, California

El St.
Railroad Ave.

Blue Lake

Soun Pacific
Environmental Services
(707) 269-0884

AERIAL/TOPO MAP			Figure
BO&T Old Office 211 Railroad Avenue Blue Lake, California 95525	Project No.	Report Date	1
	SP-23	4/18/2006	



SITE PLAN

Figure

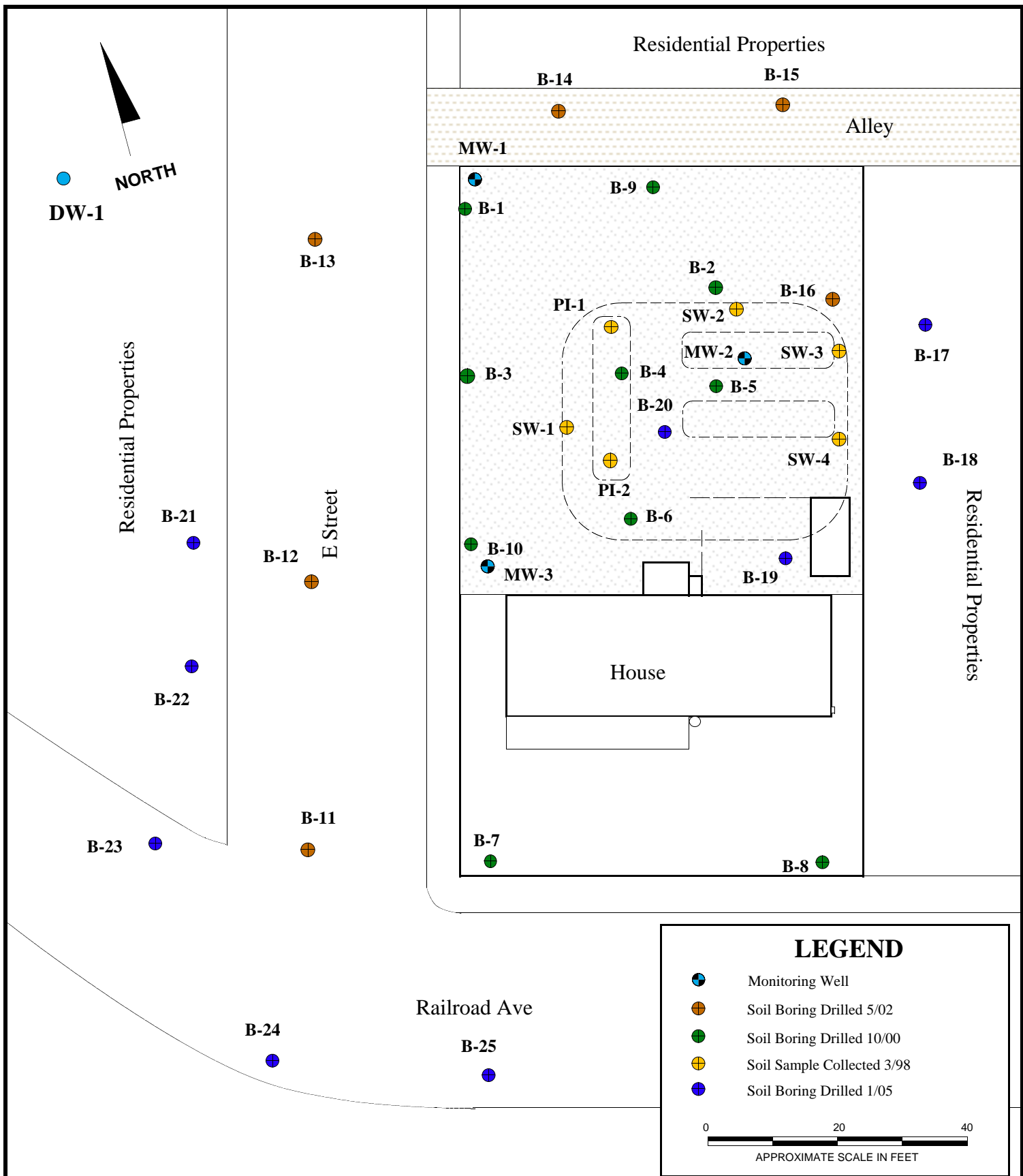
BO&T Old Office
211 Railroad Ave
Blue Lake, California 95525

Project No.
SP-23

Report Date
4/18/06

2





SAMPLE LOCATION MAP

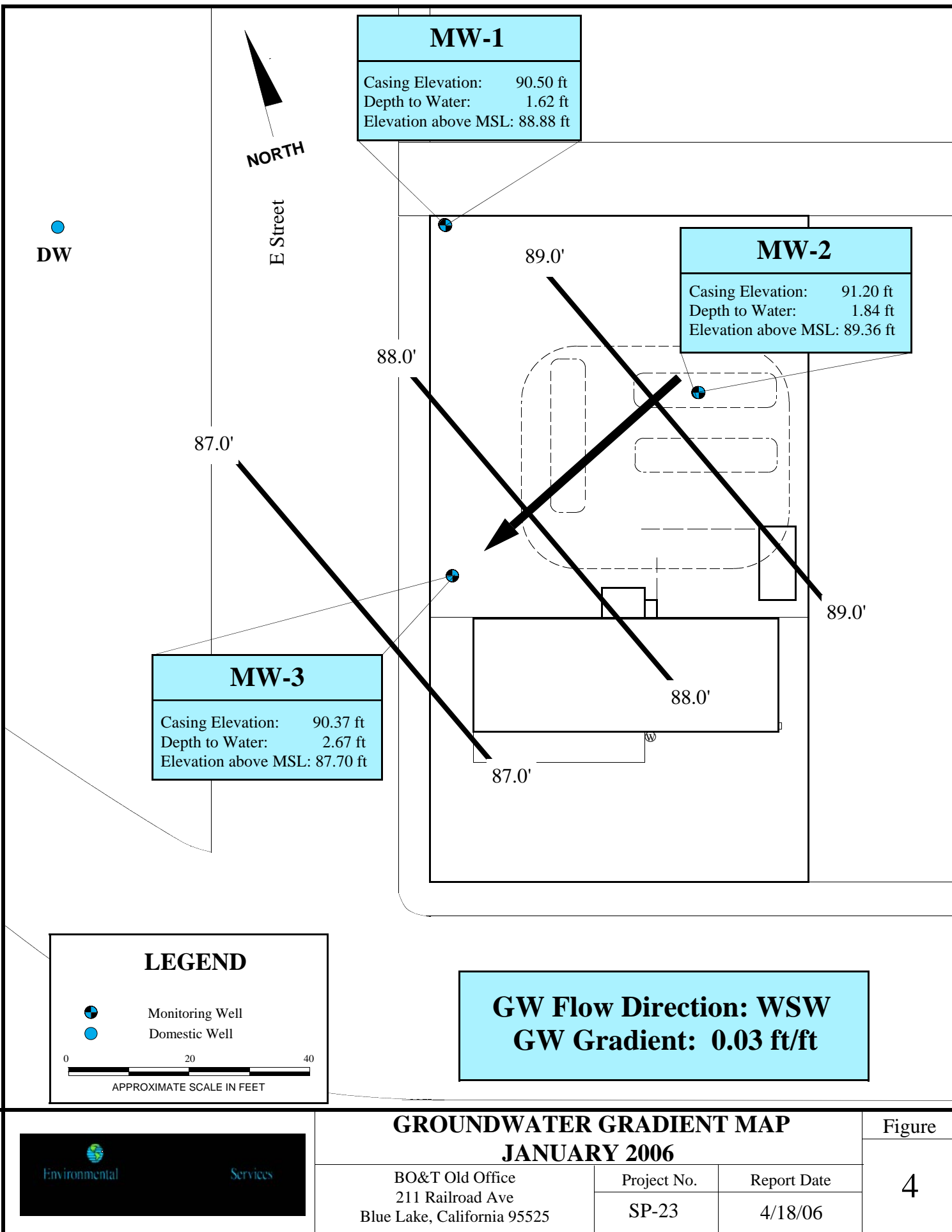
BO&T Old Office
211 Railroad Ave
Blue Lake, California 95525

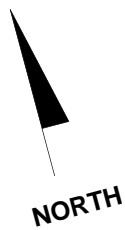
Project No.
SP-23

Report Date
4/18/06

Figure

3




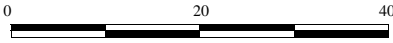


E Street

Groundwater Results MW-1		
TPHg	63.1	ppb
MTBE	92.6	ppb

LEGEND

 Monitoring Well


APPROXIMATE SCALE IN FEET

Groundwater Results MW-2		
TPHg	73.0	ppb
BTXE	6.4	ppb
MTBE	92.5	ppb
TAME	0.8	ppb

Groundwater Results MW-3		
TPHg	5,950	ppb
MTBE	12,500	ppb
TAME	67.0	ppb

Railroad Ave



GROUNDWATER ANALYTICAL RESULTS

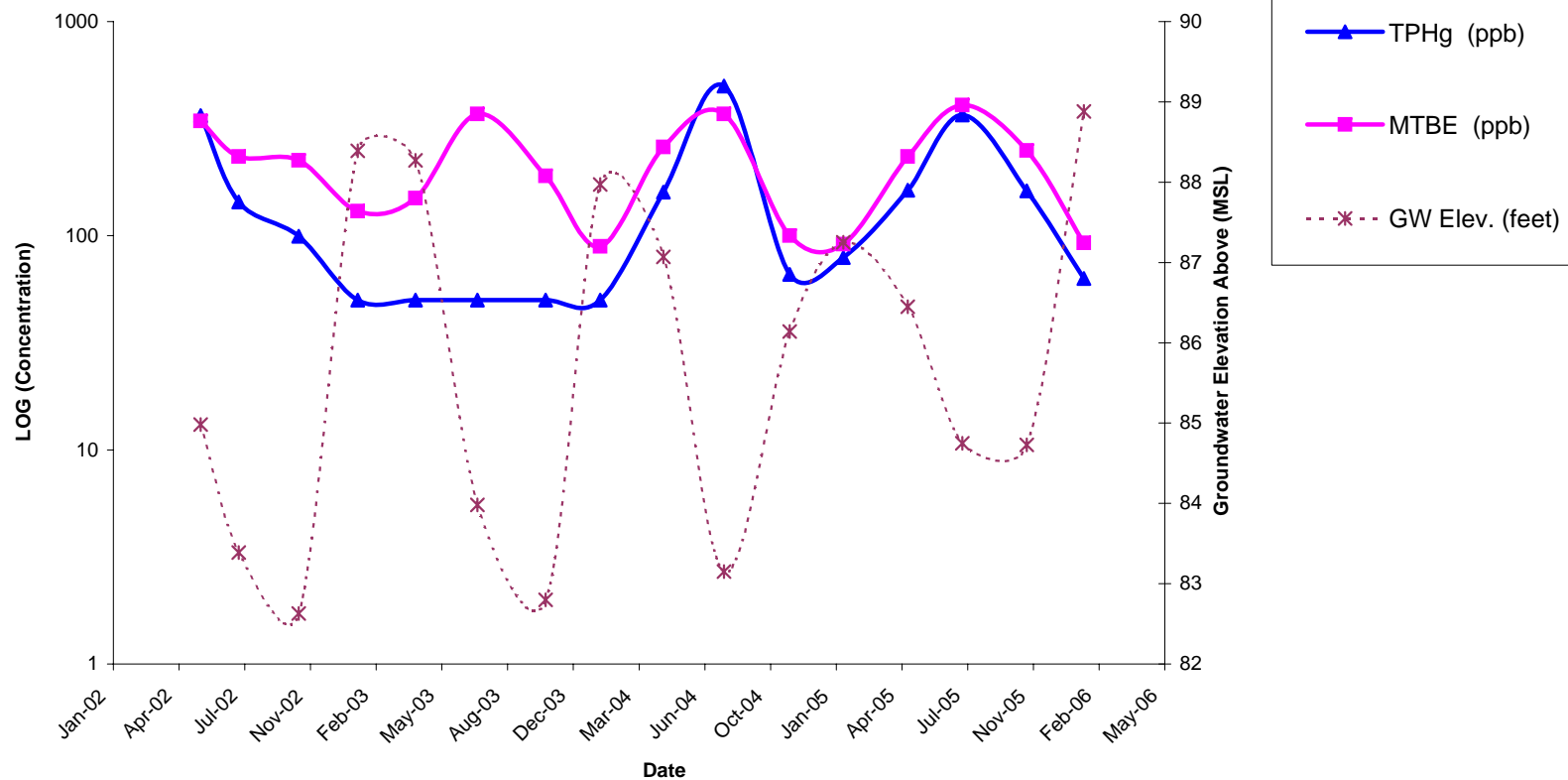
BO&T Old Office
211 Railroad Ave
Blue Lake, California 95525

Project No.
SP-23

Report Date
4/18/06

Figure

5



MW-1 HYDROCARBON CONCENTRATIONS VS. TIME

BO&T Old Office
211 Railroad Avenue
Blue Lake, California 95525

Project No.

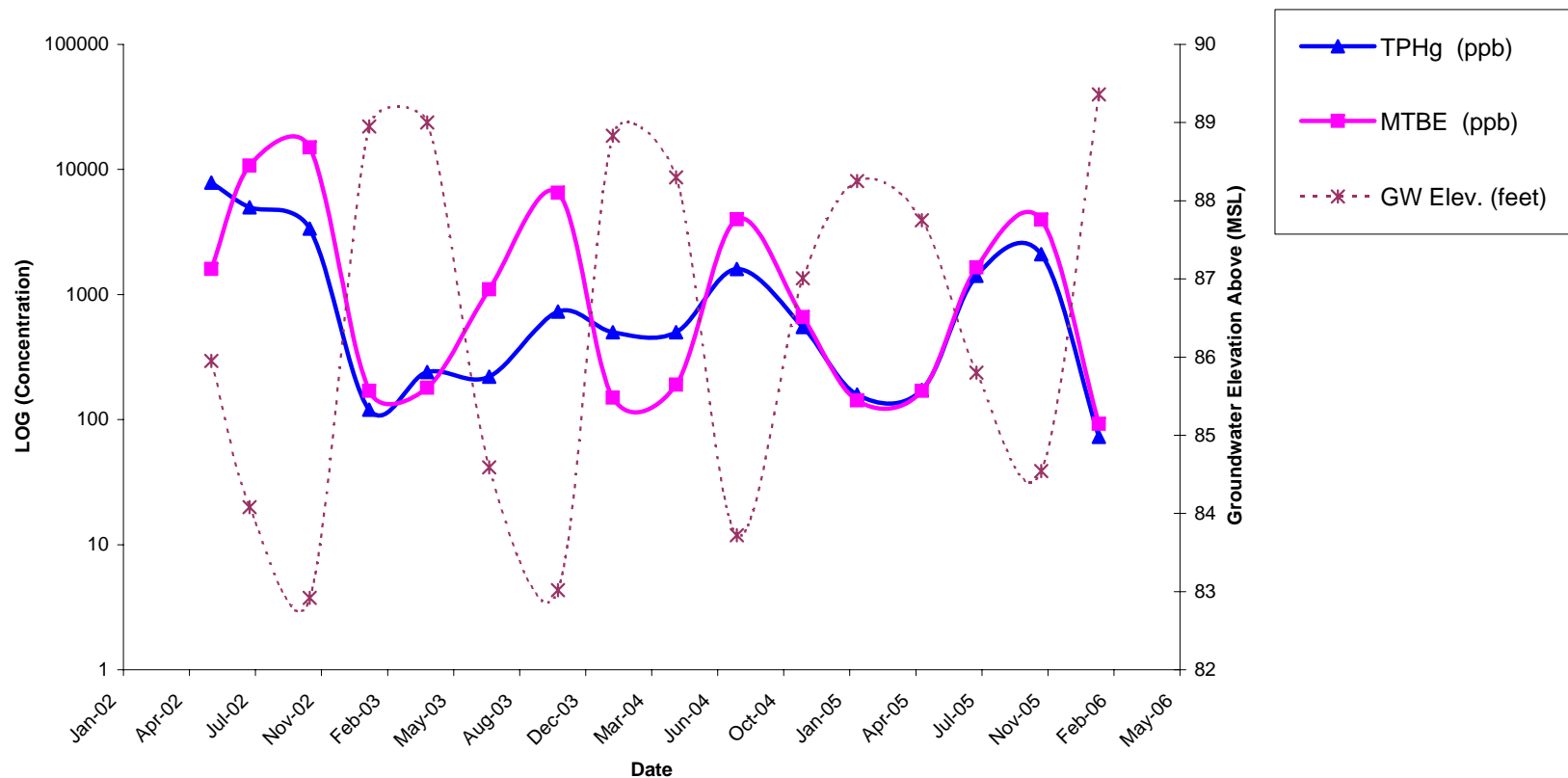
SP-23

Date

4/18/2006

Figure

6



MW-2 HYDROCARBON CONCENTRATIONS VS. TIME

BO&T Old Office
211 Railroad Avenue
Blue Lake, California 95525

Project No.

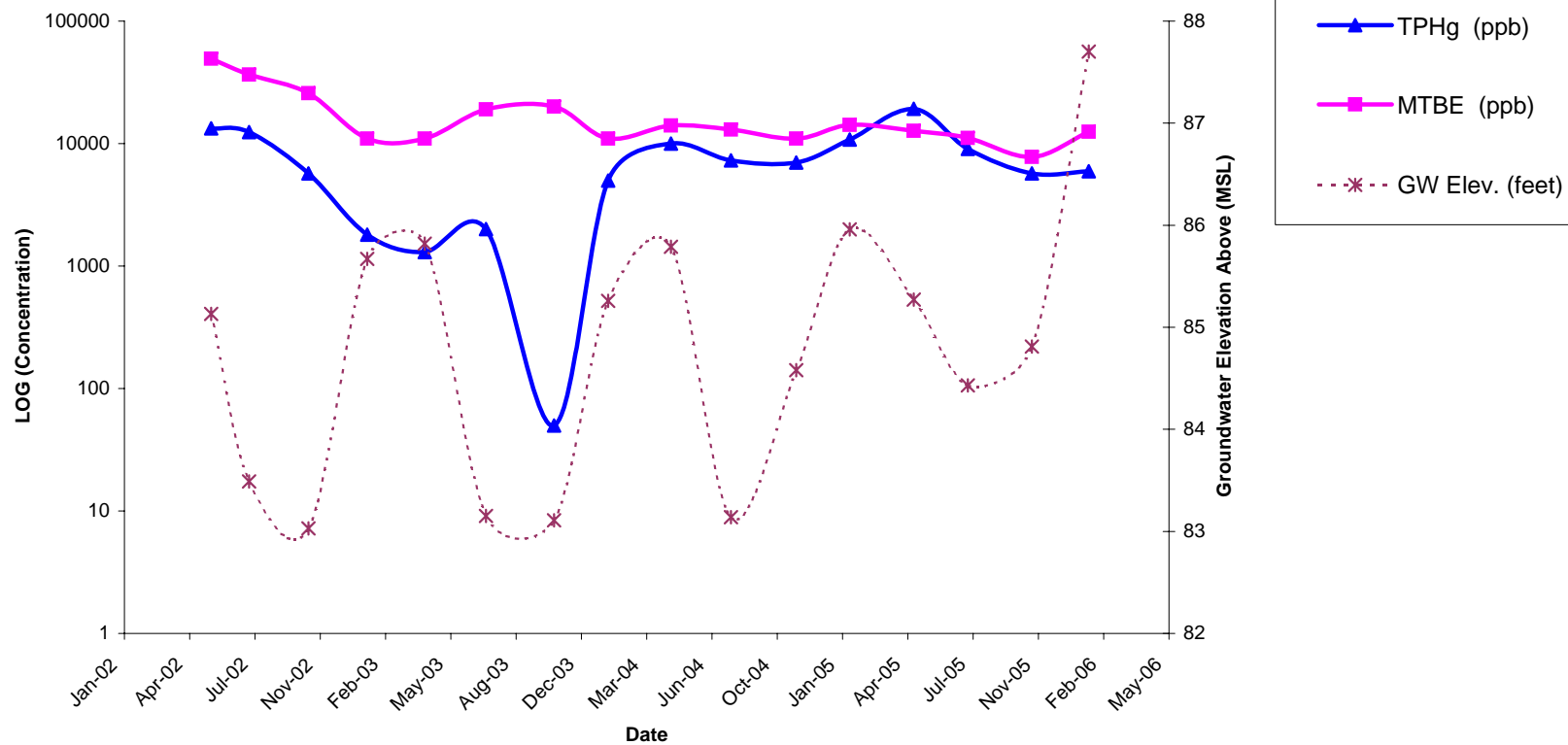
SP-23

Date

4/18/2006

Figure

7



MW-3 HYDROCARBON CONCENTRATIONS VS. TIME

BO&T Old Office
211 Railroad Avenue
Blue Lake, California 95525

Project No.

SP-23

Date

4/18/2006

Figure

8

Appendices

Appendix A



www.basiclab.com

voice 530.243.7234

fax 530.243.7494

2218 Railroad Avenue

Redding, California 96001

February 06, 2006

Lab ID: 6010710

Andy Malone
SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549
RE: BO&T OLD OFFICE SP-500

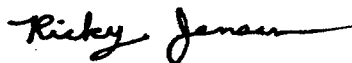
Dear Andy Malone,

Enclosed are the analysis results for Work Order number 6010710. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,


For



Ricky D. Jensen

Laboratory Director

California ELAP Certification Number 1677



basic
laboratory

www.basiclab.com

voice 530.243.7234 2218 Railroad Avenue
fax 530.243.7494 Redding, California 96001

Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Andy Malone

Project: BO&T OLD OFFICE SP-500

Description: MW-1

Matrix: Water

Lab ID: 6010710-01

Lab No: 6010710
Reported: 02/06/06
Phone: 707-269-0884
P.O. #

Sampled: 01/22/06 00:00

Received: 01/25/06 11:44

Volatile Organic Compounds

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	ug/l	63.1	Z-01		50.0	EPA 8015/8260	01/26/06	01/26/06	B6A0605
Benzene	"	ND			0.5	"	"	"	"
Toluene	"	ND			0.5	"	"	"	"
Ethylbenzene	"	ND			0.5	"	"	"	"
Xylenes (total)	"	ND			1.0	"	"	"	"
Methyl tert-butyl ether	"	92.6	R-01		4.0	"	01/26/06	"	"
Di-isopropyl ether	"	ND			0.5	"	01/26/06	"	"
Tert-amyl methyl ether	"	ND			0.5	"	"	"	"
Ethyl tert-butyl ether	"	ND			0.5	"	"	"	"
Tert-butyl alcohol	"	ND			50.0	"	"	"	"
Surrogate: 4-Bromofluorobenzene		93.2 %			43-155	"	"	"	"



Approved By

Basic Laboratory, Inc.

California D.O.H.S. Cert #1677



www.basiclab.com

voice 530.243.7234 2218 Railroad Avenue
fax 530.243.7494 Redding, California 96001

Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Andy Malone

Project: BO&T OLD OFFICE SP-500

Description: MW-2

Matrix: Water

Lab ID: 6010710-02

Lab No: 6010710
Reported: 02/06/06
Phone: 707-269-0884
P.O. #

Sampled: 01/22/06 00:00

Received: 01/25/06 11:44

Volatile Organic Compounds

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	ug/l	73.0	Z-01		50.0	EPA 8015/8260	01/26/06	01/26/06	B6A0605
Benzene	"	4.4			0.5	"	"	"	"
Toluene	"	ND			0.5	"	"	"	"
Ethylbenzene	"	ND			0.5	"	"	"	"
Xylenes (total)	"	ND			1.0	"	"	"	"
Methyl tert-butyl ether	"	92.5	R-01		50.0	"	01/26/06	"	"
Di-isopropyl ether	"	ND			0.5	"	01/26/06	"	"
Tert-amyl methyl ether	"	0.8			0.5	"	"	"	"
Ethyl tert-butyl ether	"	ND			0.5	"	"	"	"
Tert-butyl alcohol	"	ND			50.0	"	"	"	"
Surrogate: 4-Bromofluorobenzene		94.6 %		43-155		"	"	"	"


Approved By

Basic Laboratory, Inc.
California D.O.H.S. Cert #1677



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voice 530.243.7234 2218 Railroad Avenue
fax 530.243.7494 Redding, California 96001

Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Andy Malone

Project: BO&T OLD OFFICE SP-500

Description: MW-3

Matrix: Water

Lab ID: 6010710-03

Lab No: 6010710
Reported: 02/06/06
Phone: 707-269-0884
P.O. #

Sampled: 01/22/06 00:00

Received: 01/25/06 11:44

Volatile Organic Compounds

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	ug/l	5950	R-07, Z-01		2500	EPA 8015/8260	01/26/06	01/26/06	B6A0605
Benzene	"	ND	R-07		25.0	"	"	"	"
Toluene	"	ND	R-07		25.0	"	"	"	"
Ethylbenzene	"	ND	R-07		25.0	"	"	"	"
Xylenes (total)	"	ND	R-07		50.0	"	"	"	"
Methyl tert-butyl ether	"	12500	R-01, R-07		200	"	01/26/06	"	"
Di-isopropyl ether	"	ND	R-07		25.0	"	01/26/06	"	"
Tert-amyl methyl ether	"	67.0	R-07		25.0	"	"	"	"
Ethyl tert-butyl ether	"	ND	R-07		25.0	"	"	"	"
Tert-butyl alcohol	"	ND	R-07		2500	"	"	"	"
Surrogate: 4-Bromofluorobenzene		94.2 %		43-155		"	"	"	"

Notes and Definitions

Z-01	The GRO reported for this sample does not match the laboratory's gasoline standard, but is due predominantly to MTBE.
R-07	The sample was diluted due to the presence of high levels of target analytes resulting in elevated reporting limits.
R-01	The Reporting Limit and Detection Limit for this analyte have been raised due to necessary sample dilution.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maximum Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTL	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure


Approved By

Basic Laboratory, Inc.
California D.O.H.S. Cert #1677

Appendix B



Standard Operating Procedures

Groundwater Level Measurements and Free Phase Hydrocarbon Measurements

All SounPacific staff and contractors shall adopt the following procedures any time that groundwater elevations are determined for the purposes of establishing groundwater gradient and direction, and prior to any sampling event.

Wells are to be tested for free phase hydrocarbons (free product) before the first development or sampling of any new well, and in any well that has historically contained free product.

Equipment Checklist

- ☐ Combination water level / free phase hydrocarbon indicator probe (probe)
- ☐ Gauging Data / Purge Calculations Sheet
- ☐ Pencil or Pen/sharpie
- ☐ Disposable Gloves
- ☐ Distilled Water and or know water source on site that is clean
- ☐ Alconox (powder) or Liquinox (liquid) non-phosphate cleaners—do not use soap!
- ☐ Buckets or Tubs for decontamination station
- ☐ Tools necessary to access wells
- ☐ Site Safety Plan
- ☐ This Standard Operating Procedure
- ☐ Notify Job site business that you will be arriving to conduct work.

Procedure

1. Review Site Safety Plan and utilize personal protection appropriate for the contaminants that may be encountered.
2. Access and open all monitoring wells to be measured. Allow wells to equilibrate for approximately 15 minutes before taking any measurements.

3. Decontaminate probe with Alconox or Liquinox solution, and rinse with distilled water.
4. Determine the diameter of the well to be measured and indicate this on the Gauging Data / Purge Calculations Sheet.
5. Words of caution: Please be careful with water level and product meters probes are not attached with high strength material so please make sure to avoid catching the end on anything in the well and make sure not to wind reel to the point that it could pull on the probe. ***If product is suspect in a well, go to step 6, if no product is suspected go to step 7 below.***
6. **When product is present or suspected:** use the product level meter. Clip the static charge clamp to the side of the well casing. Then lower probe into the well through the product/water interface about one foot if possible. Then slowly raise the probe back up through the product/water interface layer and record the level as the tone changes from solid to broken-record this level in the Gauging Data / Purge Calculations Sheet to the nearest 0.01 foot (DTP). Continue to raise the probe up through the product until the tone stops completely-record this level on the Gauging Data / Purge Calculations Sheet to the nearest 0.01 foot (DTW). Then go to step 8.
7. **When no product is present or suspected:** If no free product is present, record the depth of the water (to the nearest 0.01 foot) relative to the painted black mark on the top of the well casing. Leave the probe in the well just a hair above the water level to ensure the well as equilibrated. As the well rises, the tone will sound. Make sure no increase in water levels have occurred in over a ten-minute period. Water levels can lower as well as rise. Make sure you note when the level you keep lowering the probe to has remained stable for at least ten minutes. Once this has been accomplished, please record this level in the Gauging Data / Purge Calculations Sheet to the nearest 0.01 foot (DTW).
8. Turn off the probe, and use the probe to determine the depth to the bottom of the well relative to the top of the well casing. This is the depth to bottom measurement (DTB).
9. Decontaminate probe and tape by washing in an Alconox/Liquinox solution (***read directions on solution for ratio of water to cleanser***) and use the toothbrush provided to remove any foreign substance from the probe and tape. Then triple rinse probe and tape with clean water and then proceed to take measurements in the next well.
10. If sampling is to occur, proceed to implement SounPacific's Standard Operating Procedure for Monitoring Well Purging and Sampling. If no sampling is to be performed, close and secure all wells and caps.



Standard Operating Procedures

Monitoring Well Purging and Groundwater Sampling

All SounPacific employees and contractors shall adopt the following procedures any time that groundwater samples are to be taken from an existing groundwater monitoring well.

Prior to the implementation of these procedures, the groundwater level **MUST** be measured and the presence of free phase hydrocarbons determined in accordance with SounPacific's Standard Operating Procedures for Groundwater Level Measurements and Free Phase Hydrocarbon Measurements.

Equipment Checklist

- ☐ **Gauging Data / Purge Calculations Sheet used for water level determination**
- ☐ Chain of Custody Form
- ☐ pH/ Conductivity / Temperature meter
- ☐ Pencil or Pen
- ☐ Indelible Marker
- ☐ Calculator
- ☐ Disposable Gloves
- ☐ Distilled Water
- ☐ Alconox/liquinox liquid or powdered non-phosphate cleaner
- ☐ Buckets or Tubs for decontamination station
- ☐ Bottom-filling bailer or pumping device for purging
- ☐ Disposable bottom-filling bailer and emptying device for sampling
- ☐ String, twine or fishing line for bailers
- ☐ Sample containers appropriate for intended analytical method (check with lab)
- ☐ Sample labels
- ☐ Site Safety Plan
- ☐ Tools necessary to access wells
- ☐ Drum space on site adequate for sampling event

SounPacific Standard Operating Procedures for Groundwater Level Measurements and Free Phase Hydrocarbon Measurements, Page 2 of 3

Procedure

1. Review Site Safety Plan and utilize personal protection appropriate for the contaminants that may be encountered.
2. Measure groundwater levels and check for the presence of free product in accordance with the Standard Operating Procedures for Groundwater Level Measurements and Free Phase Hydrocarbon Measurements.

Purging

3. Calculate and record the volume of standing water in each well using the information provided on the Gauging Data / Purge Calculations sheet.
 $(DTB-DTW) \times \text{Conversion Factor} = \text{Casing Volume}$.
4. The purge volume shall be at least three times and no more than seven times the volume of standing water (the casing volume).
5. Purge the well by bailing or pumping water from the well into a calibrated receptacle, such as a five gallon bucket or tub with markings to indicate one gallon increments. Collect purgeate in a 55 gallon labeled drum and store on site. Drum labels should include the date, contents, site number, and SounPacific's name and telephone number.
6. Take measurements of pH, conductivity, temperature, and visual observations to verify the stabilization of these parameters. At least five measurements of these parameters should be made throughout the purging process. The parameters shall be considered stabilized if successive measurements vary by less than 0.25 pH units, 10% of conductivity in μS , and 1°C (or 1.8°F). Continue purging until at least three times the casing volume has been removed, and the measured parameters have stabilized as indicated above. Do not exceed seven casing volumes.
7. Take a final depth to groundwater measurement and calculate the casing volume of the recharged well. Ideally, the casing volume should have recharged to at least 80% of the original measured casing volume before sampling commences. If due to slow recharge rates it is not feasible to wait for the well to fully recharge, then note this on the Gauging Data / Purge Calculation Sheet and proceed to sample following the procedure below.

Sampling

8. **After completing groundwater measurement, and checking for free product if necessary, in accordance with SounPacific's Standard Operating Procedures for Groundwater Level Measurements and Free Phase Hydrocarbon Measurements, and after purging monitoring wells as described above, groundwater samples may be collected.**
9. Slowly lower a clean, previously unused disposable bailer into the well water approximately half of the bailer length, and allow the bailer to slowly fill.
10. Withdraw the full bailer from the monitoring well and utilize the included (clean and unused) bottom-emptying device to fill the necessary sample containers, and seal the container with the included PTFE (Teflon) lined cap.
11. When filling VOAs, fill the VOA completely full, with the meniscus rising above the rim of the bottle. Carefully cap the VOA and invert it and gently tap it to determine whether air bubbles are trapped inside. If the VOA contains air bubbles, refill the VOA and repeat this step.
12. All samples shall be labeled with the Sample ID, the Sample Date, and the Sample Location or Project Number. Use an indelible marker for writing on sample labels.
13. Record all pertinent sample data on the Chain of Custody.
14. Place samples in an ice chest cooled to 4°C with ice or "blue ice". Bottles should be wrapped in bubble wrap, and VOA's should be inserted in a foam VOA holder to protect against breakage. Samples are to be kept at 4°C until delivered to the laboratory. Any transference of sample custody shall be indicated on the Chain of Custody with the appropriate signatures as necessary.
15. Utilize clean, previously unused gloves, bailer and line, and bottom-emptying device for each well sampled.
16. When finished with all sampling, close and secure all monitoring wells.
17. Leave the site cleaner than when you arrived and drive safely.

Appendix C

GAUGING DATA/PURGE CALCULATIONS

Job Site: BOX T. Old OfficeJob No.: SP-500Event: 15th Quarterly MonitoringDate: 1-22-06

SounPacific
Environmental Services
(707) 269-0884

WELL NO.	DIA. (in.)	DTB (ft.)	DTW (ft.)	ST (ft.)	CV (gal.)	PV (gal.)	SPL (ft.)	Barler Loads	Notes
MW-1	2	14.4	1.62	12.78	2	6			Silty at the bottom. water became clear, faint HC odor
MW-2	2	14.31	1.84	12.47	2	6			Muddy/Silty at the bottom, water became clear, faint HC odor
MW-3	2	14.4	2.67	11.73	1.9	5.7			Silty, turbid water, Med. strong HC odor

Explanation:

DIA = Well Diameter

DTB = Depth to Bottom

DTW = Depth to Water

ST = Saturated Thickness (DTB-DTW)

CV = Casing Volume (ST x cf)

PV = Purge Volume (standard 3 x CV,
well development 10 x CV)

SPL = Thickness of Separate Phase Liquid

Conversion Factors (cf):

2 in. dia. well cf = 0.16 gal./ft.

4 in. dia. well cf = 0.65 gal./ft.

6 in. dia. well cf = 1.44 gal./ft.

Sampler:

Tien-yu Tai

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Well Gauging/Sampling Report

Sheet 1 of 3

Date: <u>1-22-06</u>	Project Name: <u>BO&I Old Office</u>	Project No: <u>SP-500</u>	Well Number: <u>MW-1</u>			
Analyses Tested: <u>TPHg, BTXE, 50xys</u>						
Sample Containers: <u>3 (40ml) HIL VDAs</u>						
Purge Technique:	<input type="checkbox"/> Bailor	<input checked="" type="checkbox"/> Pump				
Sounder Used:	<input type="checkbox"/> Water Meter	<input checked="" type="checkbox"/> Interface Meter				
Water & Free Product Levels						
Time	Depth to Water	Depth to Product	Notes			
<u>12:10</u>	<u>1.62</u>		<u>No sheen</u>			
<u>12:20</u>	<u>1.62</u>		<u>sheen</u>			
<u>End</u>						
Field Measurements						
Time	Total Vol. Removed (gal)	pH	Temp (F)	Cond. (mc/cm)	DO (mg/L)	DO (%)
<u>12:57</u>	<u>0</u>	<u>6.05</u>	<u>55.77</u>	<u>0.371</u>	<u>2.49</u>	<u>23.8</u>
<u>1:02</u>	<u>2</u>	<u>6.01</u>	<u>56.98</u>	<u>0.341</u>	<u>1.21</u>	<u>11.7</u>
<u>1:06</u>	<u>4</u>	<u>5.99</u>	<u>57.20</u>	<u>0.266</u>	<u>1.00</u>	<u>9.7</u>
<u>1:10</u>	<u>6</u>	<u>5.99</u>	<u>57.33</u>	<u>0.235</u>	<u>0.84</u>	<u>8.2</u>
Field Scientist: <u>Tien-yu Tai</u>						



Well Gauging/Sampling Report

Sheet 2 of 3

Date: 1-22-06 Project Name: BOLT Old Office Project No: SP-500 Well Number: MW-2

Analyses Tested: TPHg, BTXE, 5 days

Sample Containers: 3 (40ml) HD VOA

Purge Technique: ☐ Bailor ☒ Pump

Sounder Used: ☐ Water Meter ☒ Interface Meter

Water & Free Product Levels			
Time	Depth to Water	Depth to Product	Notes
12:12	1.81		Sheen
12:25	1.84		"
12:35	1.84		"
End			

Field Measurements							
Time	Total Vol. Removed (gal)	pH	Temp (F)	Cond. (ms/cm)	DO (mg/L)	DO (%)	
1:26 P	0	5.96	55.02	0.151	0.48	4.6	
1:30	2	5.99	57.13	0.153	0.34	3.3	
1:35	4	6.06	57.27	0.155	0.46	4.4	
1:40	6	6.02	57.87	0.154	0.22	2.2	

Field Scientist: Tien-yu Tai

Well Gauging/Sampling Report

Sheet 3 of 3

Date: <u>1-22-06</u>		Project Name: <u>308T Old Office</u>		Project No: <u>SP-500</u>		Well Number: <u>MW-3</u>	
Analyses Tested: <u>TPHg, BTXE, SOXys</u>							
Sample Containers: <u>3 (40 ml) HD Vial</u>							
Purge Technique:		<input type="checkbox"/> Bailor		<input checked="" type="checkbox"/> Pump			
Sounder Used:		<input type="checkbox"/> Water Meter		<input checked="" type="checkbox"/> Interface Meter			
Water & Free Product Levels							
Time	Depth to Water	Depth to Product	Notes				
12:16	5.40		No Sheen				
12:29	4.97		..				
1:55	2.71		..				
2:00	2.67		..				
2:05	2.67		..				
End							
Field Measurements							
Time	Total Vol. Removed (gal)	pH	Temp (F)	Cond. (ms/cm)	DO (mg/L)	DO (%)	
2:09P	0	6.21	56.25	0.551	0.59	5.6	
2:13	1.9	6.21	57.21	0.564	0.62	6.1	
2:18	3.8	6.20	57.97	0.557	1.13	11.1	
2:23	5.7	6.15	58.64	0.528	0.98	9.7	
Field Scientist: <u>Tien-yu Tai</u>							